

## ABSTRACT OF THE DISCLOSURE

There is provided an encoding apparatus and method in a CDMA communication system. To encode input information of a k-bit sequence and  
5 generate a codeword with length  $N > (2^k - 1)$ , an encoder encodes the input information using an  $(r, k)$  simplex code and generates a sequence of code symbols of length  $r$  ( $r = 2^k - 1$ ), a repeater repeats the sequence of code symbols  $t$  times ( $t = \left\lfloor \frac{N}{r} \right\rfloor + 1$ ), and a puncturer performs puncturing  $A$  times ( $A = rt - N$ ) on the  
10  $t$  repeated code symbol sequences so that the resulting codes have length  $N$ . The punctured symbols are distributed uniformly across the repeated code symbol sequences or confined to the  $t^{\text{th}}$  repeated code symbol sequence.